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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/829,276

04/22/2004

Tomoki Ohkawa

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EXAMINER

CASCHERA, ANTONIO A

ART UNIT

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2628

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/829,276	Applicant(s) OHKAWA, TOMOKI	
	Examiner Antonio A. Caschera	Art Unit 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7 and 9-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7 and 9-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>02/19/09</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in the pending application.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 7 and 9 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim(s) 7 and 9 is/are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. Supreme Court precedent¹ and recent Federal Circuit decisions² indicate that a statutory “process” under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing. While the instant claim(s) recite a series of steps or acts to be performed, the claim(s) neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and

¹ *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

² *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

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therefore do not qualify as a statutory process. For example, at least the “cutting” limitation of the claims is not explicitly recited as being tied to another statutory category.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4-7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prandoni et al. (U.S. Patent 7,042,493) in view of Meier et al. (U.S. Patent 7,075,556).

In reference to claim 1, Prandoni et al. discloses a video processing apparatus (see column 1, lines 44-58 and Figure 1) *of a telecommunications system* comprising:

a video input section to which a video data comprising a plurality of frame images is input (see column 2, lines 9-14 and #101 and “video” of Figure #1 wherein Prandoni et al. discloses the apparatus to comprise of a background-foreground extraction module which receives a video sequence. The Examiner interprets the background-foreground extraction module equivalent to the video input section since data as described in the claims is received by this module of Prandoni et al.)

a drawing input section to which a drawn input image is input;

an image control section that periodically cuts out a selected image as static image information from the frame images at intervals of predetermined time (see column 2, lines 9-14, 47-62 and columns 2-3, lines 63-14 wherein Prandoni et al. discloses the apparatus to comprise

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of a background-foreground extraction module which receives a video sequence, say from a standard camera, and extracts one or several foreground features to appear in stroboscopic sequence. Prandoni et al. further discloses such extraction to occur based upon a number of “triggered” events one being frame-based triggering another being time-based triggering where foreground features are extracted at fixed time intervals, say every t seconds or as per user-defined triggering events.) *and periodically extracts the drawn input image as input drawing static information at intervals of the predetermined time;*

an image information storage section that stores the static image information (see column 5, lines 20-23 wherein Prandoni et al. claims a computer performing the methods of the invention. Note, the Examiner interprets the computer of Prandoni et al. to inherently comprise of some sort of memory for storing, at least temporarily, the foreground/background extracted images/objects since Prandoni et al. discloses explicit manipulation of such information which would require at least temporary storage of the data.) *and the input drawing static information;*

an image combining section that combines the static image information *and the input drawing static information* to create combined image information (see column 3, lines 15-41 and Figure 1 wherein Prandoni et al. discloses a synthesis module that combines selected foreground features and background visual information into a composite image); and

an image drawing section that outputs the combined image information (see columns 3-4, lines 42-14 and Figure 1 wherein Prandoni et al. discloses a rendering module that in some instances, produces/outputs a video sequence of composite images) and;

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a display section that display the combined image information (see column 2, lines 38-42 and #130 of Figure 1 wherein Prandoni et al. discloses a rendering module transforming data suitable for display on a video device),

wherein the predetermined time is set to be greater than or equal to a processing time of the drawing processing apparatus, said processing time being a duration starting from a time when the selected image is cut out to a time when the combined image information is displayed on the display section (see column 3, lines 3-4, 11-13 and 62-67 wherein Prandoni et al. discloses extraction to occur based upon a number of “triggered” events one being frame-based triggering another being time-based triggering and another being user-defined where foreground features are extracted at fixed time intervals, say every t seconds and as per a user’s involvement clicking on image frames. Prandoni et al. further discloses the video sequence being rendered when the triggering events are reached. Therefore, the Examiner interprets the above mentioned per frame triggered extraction techniques of Prandoni et al. at least equal to the time from when an image is selected via the frame-defined trigger event to the time that a composite image is rendered/displayed. Further, the Examiner states that such a timing as recited by Applicant’s claim is inherent to the timing of Prandoni et al. since it is inherent that video sequence data is displayed at x frames per second and therefore, the time between when extraction is performed for a frame and when combined information is displayed is predetermined.) and

wherein said telecommunications system includes a plurality of participant terminals.

Prandoni et al. does not explicitly disclose extracting input drawing static information from a drawn input image every predetermined time. Meier et al. discloses a system for annotating video or still images wherein a user utilizing a telestrator to draw upon video images

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and to combine the drawn and video images for broadcasted display (see column 1, lines 23-24, column 3, lines 60-63, columns 4-5, lines 51-4). Meier et al. explicitly discloses a telestration processor receiving an input from a touch screen or pen/stylus for a drawing upon the screen (see column 4, lines 51-60 and column 12, lines 41-44). Meier et al. discloses the telestration processor outputting such pixel data along with time code data associating such pixel data with specific frames/fields to a rendering processor which processes such data on a frame by frame basis (see columns 15-16, lines 58-2 and Figure 11). Note, the Examiner interprets such reading of data from the touch screen/pen/stylus input via the telestration processor, marking such data with specific time code data, more specifically the time code data being in units of frames/fields, equivalent to Applicant's periodically extracting the drawing input at intervals of a predetermined time (as indicated by the associated time code in Meier et al.). Further, since Meier et al. discloses the invention directed towards the field of telestration in a television system for, say a televised football game (see columns 1-2), the Examiner interprets the invention to be directed towards the field of telecommunications including a plurality of participant terminals (television viewers). Lastly, note the Examiner believes Meier et al. to be directly applicable to Prandoni et al.'s field of invention and further believes the two invention to be able to function correctly since they are both based upon extraction/processing of data on a frame-by-frame basis. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the telestration system including touch screen/pen/stylus and video based image processing techniques of Meier et al. with the foreground/background image data processing techniques of Prandoni et al. in order to allow the viewing of real-time user interaction data along with video captured data on a display simultaneously allowing for

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multiple viewers/users of the system to better graphically articulate information to one another that is explicit to the captured video (see column 1, lines 40-54 and column 2, lines 30-32 and 56-63 of Meier et al.).

In reference to claim 4, Prandoni et al. and Meier et al. disclose all of the claim limitations as applied to claim 1 above. Prandoni et al. discloses the apparatus to comprise of a background-foreground extraction module which receives a video sequence, say from a standard camera, and extracts one or several foreground features to appear in stroboscoping sequence (see column 2, lines 9-14, 47-62 and columns 2-3, lines 63-14). Prandoni et al. discloses a rendering module that in some instances, produces/outputs a video sequence of composited images (see columns 3-4, lines 42-14 and Figure 1), the rendering module seen as providing equivalent functionality as Applicant's moving image reproducing section. Prandoni et al. claims a computer performing the methods of the invention (see column 5, lines 20-23). Note, the Examiner interprets the computer of Prandoni et al. to inherently comprise of some sort of memory or moving image storage section for storing, at least temporarily, the rendered/output video stroboscoped sequences.

In reference to claim 5, Prandoni et al. and Meier et al. disclose all of the claim limitations as applied to claim 1 above. Prandoni et al. discloses the apparatus to comprise of a background-foreground extraction module which receives a video sequence, say from a standard camera, and extracts one or several foreground features to appear in stroboscoping sequence (see column 2, lines 9-14, 47-62 and columns 2-3, lines 63-14). Prandoni et al. discloses a rendering module that in some instances, produces/outputs a video sequence of composited images (see columns 3-4, lines 42-14 and Figure 1). Meier et al. discloses allowing the user to create a

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drawing defined by polygons, alpha values, color values, texture values and fill characteristics (see columns 15-16, lines 58-1) and in one particular embodiment, details the user drawing a arrow/line which the Examiner interprets as inherently equivalent to vector data (see Figures 1-4 and column 12, lines 41-43). Meier et al. also discloses combining such drawing input with video frame data capture from cameras (see columns 15-16, lines 58-8 and Figures 11-12). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the telestration system including touch screen/pen/stylus and video based image processing techniques of Meier et al. with the foreground/background image data processing techniques of Prandoni et al. in order to allow the viewing of real-time user interaction data along with video captured data on a display simultaneously allowing for multiple viewers/users of the system to better graphically articulate information to one another that is explicit to the captured video (see column 1, lines 40-54 and column 2, lines 30-32 and 56-63 of Meier et al.).

In reference to claim 6, Prandoni et al. and Meier et al. disclose all of the claim limitations as applied to claim 5 above. Meier et al. discloses the drawing data to include pixel coordinates for the drawn polygons, color data, tessellations per quadrilateral (number of subdivides), texture data and fill characteristics for the polygons (see columns 15-16, lines 65-2) which the Examiner interprets equivalent to Applicant's drawing data.

In reference to claim 7, claim 7 is equivalent in scope to claim 1 and is therefore rejected under similar rationale. Further, it is noted that claim 7 recites a method type claim, the steps of the method as claimed are disclosed by the above recited teachings of the combination of Prandoni et al. and Meier et al..

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In reference to claim 10, claim 10 is equivalent in scope to claim 1 and is therefore rejected under similar rationale. Further, it is noted that claim 10 recites a computer-readable medium/program type claim, the steps of the program executed by the computer as claimed are disclosed by the above recited teachings of the combination of Prandoni et al. and Meier et al.. Prandoni et al. claims a computer performing the methods of the invention (see column 5, lines 20-23). Note, the Examiner interprets the computer of Prandoni et al. to inherently comprise of some type of memory or medium for storing instructions/programs to execute or perform tasks.

4. Claims 3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prandoni et al. (U.S. Patent 7,042,493), Meier et al. (U.S. Patent 7,075,556) and further in view of Seedholm, Peter. "Print Screen Button Tutorial."

(<http://www.ibiblio.org/virtualcell/Tutor1/TandR/prtscr.html>).

In reference to claims 3 and 9, Prandoni et al. and Meier et al. disclose all of the claim limitations as applied to claims 1 and 7 respectively above. Prandoni et al. claims a computer performing the methods of the invention (see column 5, lines 20-23) which the Examiner interprets as inherently comprising a keyboard providing some sort of input to the invention. Neither Prandoni et al. nor Meier et al. explicitly disclose the image drawing section having a function of capturing the combined image using a screen capture signal by an image capture operation of a user. Seedholm discloses a tutorial for capturing and pasting a displayed screen of data using the print screen button on a keyboard (see steps 1-6 of Seedholm). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the print screen display screen capturing techniques of Seedholm with the telestration system of Meier et al. and foreground/background image data processing techniques of Prandoni et al. in

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order to capture the current displayed image on a display monitor and further process the image by i.e. pasting it into another program/application, transmitting it over a network medium, saving it to a computer medium etc.

5. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Prandoni et al. (U.S. Patent 7,042,493), Meier et al. (U.S. Patent 7,075,556) and further in view of Dempksi et al. (U.S. Pub 20040155902).

In reference to claim 11, Prandoni et al. discloses a video processing apparatus (see column 1, lines 44-58 and Figure 1) *teleconference system in which a plurality of participant terminals which participate in a conference are connected through a communication line*, wherein a drawing processing apparatus comprises:

a video input section to which a video data comprising a plurality of frame images is input (see column 2, lines 9-14 and #101 and “video” of Figure #1 wherein Prandoni et al. discloses the apparatus to comprise of a background-foreground extraction module which receives a video sequence. The Examiner interprets the background-foreground extraction module equivalent to the video input section since data as described in the claims is received by this module of Prandoni et al.)

a drawing input section to which a drawn input image is input;

an image control section that periodically cuts out a selected image as static image information from the frame images at intervals of predetermined time (see column 2, lines 9-14, 47-62 and columns 2-3, lines 63-14 wherein Prandoni et al. discloses the apparatus to comprise of a background-foreground extraction module which receives a video sequence, say from a standard camera, and extracts one or several foreground features to appear in stroboscopic

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sequence. Prandoni et al. further discloses such extraction to occur based upon a number of “triggered” events one being frame-based triggering another being time-based triggering where foreground features are extracted at fixed time intervals, say every t seconds or as per user-defined triggering events.) *and periodically extracts the drawn input image as input drawing static information at intervals of the predetermined time;*

an image information storage section that stores the static image information (see column 5, lines 20-23 wherein Prandoni et al. claims a computer performing the methods of the invention. Note, the Examiner interprets the computer of Prandoni et al. to inherently comprise of some sort of memory for storing, at least temporarily, the foreground/background extracted images/objects since Prandoni et al. discloses explicit manipulation of such information which would require at least temporary storage of the data.) *and the input drawing static information;*

an image combining section that combines the static image information *and the input drawing static information* to create combined image information (see column 3, lines 15-41 and Figure 1 wherein Prandoni et al. discloses a synthesis module that combines selected foreground features and background visual information into a composite image); and

an image drawing section that outputs the combined image information (see columns 3-4, lines 42-14 and Figure 1 wherein Prandoni et al. discloses a rendering module that in some instances, produces/outputs a video sequence of composite images) and;

a display section that display the combined image information (see column 2, lines 38-42 and #130 of Figure 1 wherein Prandoni et al. discloses a rendering module transforming data suitable for display on a video device),

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wherein the predetermined time is set to be greater than or equal to a processing time of the drawing processing apparatus, said processing time being a duration starting from a time when the selected image is cut out to a time when the combined image information is displayed on the display section (see column 3, lines 3-4, 11-13 and 62-67 wherein Prandoni et al. discloses extraction to occur based upon a number of “triggered” events one being frame-based triggering another being, another being time-based triggering and another being user-defined where foreground features are extracted at fixed time intervals, say every t seconds and as per a user’s involvement clicking on image frames. Prandoni et al. further discloses the video sequence being rendered when the triggering events are reached. Prandoni et al. further discloses the video sequence being rendered when the triggering events are reached. Therefore, the Examiner interprets the above mentioned per frame triggered extraction techniques of Prandoni et al. at least equal to the time from when an image is selected via the frame-defined trigger event to the time that a composite image is rendered/displayed. Further, the Examiner states that such a timing as recited by Applicant’s claim is inherent to the timing of Prandoni et al. since it is inherent that video sequence data is displayed at x frames per second and therefore, the time between when extraction is performed for a frame and when combined information is displayed is predetermined.).

Prandoni et al. does not explicitly disclose extracting input drawing static information from a drawn input image every predetermined time. Meier et al. discloses a system for annotating video or still images wherein a user utilizing a telestrator to draw upon video images and to combine the drawn and video images for broadcasted display (see column 1, lines 23-24, column 3, lines 60-63, columns 4-5, lines 51-4). Meier et al. explicitly discloses a telestration

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processor receiving an input from a touch screen or pen/stylus for a drawing upon the screen (see column 4, lines 51-60 and column 12, lines 41-44). Meier et al. discloses the telestration processor outputting such pixel data along with time code data associating such pixel data with specific frames/fields to a rendering processor which processes such data on a frame by frame basis (see columns 15-16, lines 58-2 and Figure 11). Note, the Examiner interprets such reading of data from the touch screen/pen/stylus input via the telestration processor, marking such data with specific time code data, more specifically the time code data being in units of frames/fields, equivalent to Applicant's periodically extracting the drawing input at intervals of a predetermined time (as indicated by the associated time code in Meier et al.). Further, since Meier et al. discloses the invention directed towards the field of telestration in a television system for, say a televised football game (see columns 1-2), the Examiner interprets the invention to be directed towards the field of telecommunications including a plurality of participant terminals (television viewers). Lastly, note the Examiner believes Meier et al. to be directly applicable to Prandoni et al.'s field of invention and further believes the two invention to be able to function correctly since they are both based upon extraction/processing of data on a frame-by-frame basis. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the telestration system including touch screen/pen/stylus and video based image processing techniques of Meier et al. with the foreground/background image data processing techniques of Prandoni et al. in order to allow the viewing of real-time user interaction data along with video captured data on a display simultaneously allowing for multiple viewers/users of the system to better graphically articulate information to one another that is explicit to the captured video (see column 1, lines 40-54 and column 2, lines 30-32 and

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56-63 of Meier et al.). Although Meier et al. does disclose such telestration techniques used in a telecommunications environment, neither Prandoni et al. nor Meier et al. explicitly disclose their image data processing techniques within a specific teleconferencing environment however Dempski et al. does. Dempski et al. discloses a computer system in a teleconferencing environment for superimposing a computer-generated image onto a video image or vice versa (see paragraphs 5 and 11 of Dempski et al.). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teleconference superimposing techniques of Dempski et al. with the telestration system including touch screen/pen/stylus and video based image processing techniques of Meier et al. and foreground/background image data processing techniques of Prandoni et al. in order to allow multiple users to view, manipulate, and share real-time data in a teleconferencing environment making it easier to communicate to users in remote locations (see paragraphs 2-3 of Dempski et al.).

Response to Arguments

6. Applicant's arguments, see pages 2-5 of Applicant's Remarks, filed 12/29/08 and the remarks presented in the Interview of 01/28/09, with respect to the rejection(s) of claim(s) 1, 3-7 and 9-11 under 35 USC 103, in view of Tam et al., have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Meier et al..

Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Antonio Caschera whose telephone number is (571) 272-7781. The examiner can normally be reached Monday-Thursday and alternate Fridays between 7:00 AM and 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung, can be reached at (571) 272-7794.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

571-273-8300 (Central Fax)

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (571) 272-2600.

/Antonio A Caschera/

Primary Examiner, Art Unit 2628

3/19/09